



TOPICS

The lectures are primarily aimed at Ph.D. students and Postdocs interested in the following topics:

- Steady state tire and pavement description
- Thermomechanical investigations • Modelling of layer bond behaviour • Simulation of long-term behaviour
- Microstructural analysis • Modelling of asphalt compaction • Characterization of asphalt performance
- Rubber friction • Wet friction • Lubricated friction • Surface wetting • Skid resistance
- Modelling of asphalt materials • Performance-oriented tests of asphalt, bitumen and mastic
- Evaluation of the effects of non-uniform tire contact stresses on the asphalt performance
- Tire testing procedures • Dynamic tire footprint measurements • Vertical and lateral tire force characteristics • Differences between laboratory and asphalt tire performance • Influence of microroughness on tire behaviour • Tire modelling

ORGANIZERS

ISD & ISS, TU Dresden
ISV, University of Stuttgart
ISAC & ika, RWTH Aachen University

ARRIVAL/DEPARTURE

Transfers by bus will be organized from Cologne Central Station on Sunday afternoon and back on Wednesday afternoon.

COSTS

Participation fee: 100 Euro
(lectures & lunch + dinner)
Travel costs and accommodation are not included, please make a reservation using the hotel contingent named Summer School, childcare services can be offered during the lectures.

Application Deadline 31 Aug. 2019

Please apply by email.

Contact

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Image sources: <http://www.kloster-steinfeld.com/>



Future Challenges in Pavement Design and Tire-road Interaction

INTERNATIONAL SUMMER SCHOOL

30 Sep – 2 Oct 2019

Steinfeld, Eifel
Germany

sponsored by

DFG Deutsche
Forschungsgemeinschaft





ACCOMMODATION

Kloster Steinfeld

Hermann-Josef-Straße 4
53925 Kall-Steinfeld
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SCHEDULE

Arrival	Sunday afternoon
Monday, 30 Sep 2019	am: lectures pm: lectures
Tuesday, 1 Oct 2019	am: lectures pm: excursion Vogelsang IP Eifel National Park
Wednesday, 2 Oct 2019	am: lectures
Departure	Wednesday afternoon

LECTURES AND SPEAKERS

Numerical Simulation of Tire-Pavement-Interaction and Long-term Behaviour

Univ.-Prof. Dr.-Ing. habil. Michael Kaliske,
TU Dresden, *Institute for Structural Analysis*

Microstructure Analysis of Asphalt Compaction and Asphalt Performance

Univ.-Prof. Dr.-Ing. habil. Markus Oeser,
M.Sc. Chonghui Wang, RWTH Aachen University,
Chair and Institute of Highway Engineering

Numerical Simulation of Wet Pavement Friction

Univ.-Prof. Dr.-Ing. Wolfram Ressel,
M.Sc. Tobias Götz, University of Stuttgart,
*Institute for Road and Transport Science,
Chair for Road Design and Construction*

Experimental Characterization and Modelling of Asphalt Materials at Different Length Scales

Univ.-Prof. Dr.-Ing. habil. Frohmut Wellner,
M.Sc. Gustavo Canon Falla, TU Dresden,
Institute of Urban and Pavement Engineering

Measurement and Simulation of Tire-Pavement-Interaction

M.Sc. Jan Friederichs, M.Sc. Stefan Pyrek,
RWTH Aachen University,
Institute for Automotive Engineering

Research Challenges for Emerging Trends in Transportation

Univ.-Prof. Dr.-Ing. Bernhard Friedrich,
TU Braunschweig,
Institute of Transportation and Urban Engineering

What is Asphalt Performance?

Univ.-Prof. Dipl.-Ing. Dr. techn. Ronald Blab,
TU Wien, *Institute of Transportation*

Pavement Recycling - Today and Tomorrow

Dr.-Ing. Knut Johannsen,
EUROVIA Services GmbH, Bottrop

Influence of Paving and Compaction on Asphalt Properties

Dr.-Ing. Ronald Utterodt,
Caterpillar Inc.